

RED BLOOD CELLS LOADED WITH S-NITROSOTHIOL  
AND USES THEREFOR

ABSTRACT OF THE DISCLOSURE

Red blood cells can be loaded with low molecular weight nitrosylating agents,  
5 such as S-nitrosothiols, to act as a delivery system for NO<sup>+</sup> groups to tissues. Loaded  
red blood cells can be used in methods of therapy for conditions which are characterized  
by abnormal O<sub>2</sub> metabolism of tissues, oxygen-related toxicity, abnormal vascular tone,  
abnormal red blood cell adhesion, or abnormal O<sub>2</sub> delivery by red blood cells. Such  
treatment of red blood cells can be extended to *in vivo* therapies, with the object to  
10 achieve an increase in the ratio of red blood cell S-nitrosothiol to hemoglobin.